

REMARKS

The above amendments and these remarks are responsive to the Office action dated November 14, 2003. Claims 16-48 are pending in the application. In the Office action, the Examiner rejected claims 19, 24, 26-33, and 35-3 under 35 U.S.C. § 112, first paragraph; rejected claims 16-17, 19, and 21-22 under 35 U.S.C. § 102(b); rejected claims 20, 23, 25, 38-40, and 42-48 under 35 U.S.C. § 103(a); and objected to claims 18 and 41 as being dependent upon a rejected base claim.

Claims 17-19, 27-33, and 35 are cancelled. Claims 16, 24-26, 36, 38, 40-48 are amended. New claims 49-50 are added. In view of the amendments above, and the remarks below, applicant respectfully requests reconsideration of the application under 37 C.F.R. § 1.111 and allowance of the pending claims.

Rejections under 35 U.S.C. § 112

Claims 19, 24, 26-33, and 35-3 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. In particular, the Examiner considers the recitation that the second motion of the platen being rotational is deemed to constitute new matter. Applicant respectfully disagrees, and suggests that it would be impossible for the platen to undergo 'curvilinear translational motion' as stated in the Office action, without the platen exhibiting rotational motion with respect to stepped shafts 102 and 104.

However, in the interest of furthering prosecution of the application, applicant has cancelled claims 19, 27-33, and 35, and amended claims 24, 26, and 36 to remove reference to rotation of the platen. In view of the above amendments, applicants respectfully requests the withdrawal of the rejection of claims 24, 26, 36, and 37 under 35 U.S.C. § 112.

Rejections under 35 U.S.C. § 102

Claims 16-17, 19, and 21-22 are rejected under 35 U.S.C. § 102(b) as being anticipated by Linden (Netherlands Patent No. 8802627). The Examiner indicates that Linden discloses the subject matter set forth in the rejected claims, as the platen of Linden carries a deformable pad and an abrasive, and is driven in a curvilinear translation orbiting motion superimposed on a twisting motion of the platen.

With respect to claim 16, applicant has amended the claim to incorporate subject matter recited in claim 18. Claim 16 recites a sander that includes a drive mechanism configured to move an abrasive in a first motion superimposed on a second motion that is a circular translational orbit.

The Linden reference fails to disclose sander that includes a drive mechanism as recited in claim 16. The Linden deburring apparatus includes a motor 40 configured to apply rotation to eccentric crank shafts 19, in order to produce an oscillation in plate 16. The Examiner indicates that the abrasive associated with plate 16 is also driven in a twisting motion. However, as recited at page 3, paragraphs 5-6 of the provided translation of Linden, assembly plate 24 rests on, and is able to rotate upon, sliding material 42 and

The drawing consists of two views of a mechanical assembly, labeled 10 and 11.

View 10 (Side View): This view shows the overall profile of the assembly. Key components include a base (10), a central body (11), and a top cover (12). A large rectangular component (40) is mounted on top. A vertical rod (13) passes through the center. A horizontal rod (14) is also visible. A cross-section of a valve or actuator (15) is shown on the right. Dimensions include a width of 20 and a height of 22.

View 11 (Cross-sectional View): This view shows the internal components of the assembly. Key components include a base (10), a central body (11), and a top cover (12). A large rectangular component (40) is mounted on top. A vertical rod (13) passes through the center. A horizontal rod (14) is also visible. A cross-section of a valve or actuator (15) is shown on the right. Dimensions include a width of 20 and a height of 22.

Fig. 1: A side view of the assembly showing components 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47. Dimensions: 20, 22, 45.

Fig. 2: A cross-sectional view of the assembly showing components 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47. Dimensions: 20, 22, 45.

Applicant suggests that this twisting motion is not a driven motion, and that therefore that the drive mechanism of Linden is not configured to move the abrasive in a first motion superimposed on a second circular translational orbit, as recited by claim 16. Claim 16 is therefore allowable over the Linden reference.

Claim 17 is amended to recite that the first motion is an orbital motion. The subject matter of claim 17 therefore corresponds to that of original claim 18 which was previously deemed allowable over the Linden reference. Claims 18 and 19 are cancelled and thereby rendered moot. Claims 17, 21, and 22 depend from amended claim 16, and therefore should also be allowable over the Linden reference. Applicant therefore respectfully requests the withdrawal of the rejections of claims 16, 17, and 21-22 under 35 U.S.C. § 102(b).

Rejections under 35 U.S.C. § 103

Claims 20, 23, 25, 38-40, and 42-48 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Linden. The Examiner states that to provide the abrasive in the form of an abrasive sheet would have been an obvious matter of design choice to those of ordinary skill in the art.

As indicated above, the applicant has amended claim 16. Claim 16 now recites a sander having a drive mechanism configured to move the abrasive in a first motion superimposed on a second circular translational orbit. As discussed above, the Linden deburring assembly fails to include a drive mechanism configured to drive the abrasive in a first motion superimposed on a circular translational orbit. Applicant suggests that Linden similarly fails to provide a suggestion to modify the drive mechanism of the deburring mechanism to yield the sander of claim 16. Such motivation or suggestion must be provided by the prior art itself.

Applicant suggests that as claims 17, 20, 23, and 25 depend directly or indirectly from claim 16, are similarly allowable over the Linden reference.

Similarly, applicant has amended claim 38 to recite a sander that includes a drive mechanism configured to move an abrasive sheet structure in an orbital motion superimposed on a driven second motion. As assembly plate 24 is permitted to rotate freely in the tracks defined by sliding material 42 and 43, the twisting motion of assembly plate 24 is a nondriven motion. Linden therefore fails to disclose or suggest a sander that includes a drive mechanism configured to move an abrasive sheet structure in an orbital motion superimposed on a *driven* second motion.

As claims 39-48 depend from claim 38, they are allowable over the Linden reference for at least the same reasons that claim 38 is allowable over the Linden reference. Applicant takes this opportunity to amend claims 42-48 to recite a platen structure, and to add new claims 49 and 50, that also depend from claim 38. Support for the amendments to claims 42-48 and for new claims 49 and 50 may be found in claim 1 as originally filed.

Claim Objections

The Examiner has indicated that claims 18 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the elements of the base claim and any intervening claims.

Applicant is grateful for the indication of allowable subject matter, and has accordingly amended claim 41 to place it in independent form. Applicant suggests that

claim 41 is therefore in condition for allowance, and respectfully requests the withdrawal of the objection to claim 41.

If there are any questions regarding this paper, or the application as a whole, the Examiner is encouraged to contact the undersigned attorney so that allowance of the claims can be facilitated.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, to: Mail Stop FEE AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on March 15, 2004.

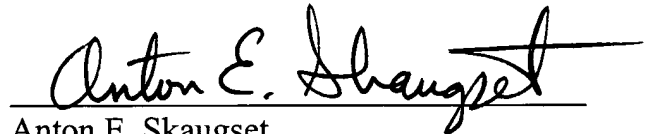


Pamela A. Knight

Date of Signature: March 15, 2004

Respectfully submitted,

KOLISCH HARTWELL, P.C.



Anton E. Skaugset

Registration No. 38,617

Customer PTO No. 23581

of Attorneys/Agents for Applicant

200 Pacific Building

520 S.W. Yamhill Street

Portland, Oregon 97204

Telephone: (503) 224-6655

Facsimile: (503) 295-6679